

## HAEMOLAEELAPS BIBBYI, A NEW RAT ECTOPARASITE FROM SAMAR

(ACARINA, LAELAPTIDAE)

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Among a collection of mites received for study from the United States National Museum, through the courtesy of Dr. E. W. Baker, was a small series of a species new to science. The series consisted of two females, two males, and one deutonymph. It is named and described below.

### *Haemolaelaps bibbyi*, new species

(Figures 1-12)

A fairly large, long-legged, robust mite. The female is about one millimeter long.

Female. (Figs. 8-12) Gnathosoma. Arms of the chela stout; *dentis mobilis* stout with three teeth and a crown of setae at its base. The *dentis fixitis* has two teeth and an almost straight needle-shaped seta near the apex; below this seta there are several very small saw-like teeth. The epistome is composed of a membranous transparent anterior portion rising from a sclerotized base, as is usual in this genus. The lingula is rather long and acute. The hypostome has the usual six rows of four or five teeth each.

Dorsal side (Fig. 11). The dorsal shield which is covered by a network of fine lines, covers the dorsum except for a small area. There are about 40 pairs of setae and several pairs of pores. There are two pairs of large pores, one near the anterior margin and the other near the posterior margin. The anterior and peripheral setae are long; many of the mid-dorsal setae are broken but there are a few short weak setae visible. The dorsal plate is  $950\mu$  long and  $650\mu$  wide.

Ventral side. The sternal plate is about  $130\mu$  long by  $200\mu$  wide at the narrowest point. It has the usual three pairs of setae and two pairs of pores; setae medium length. The presternal area is slightly sclerotized. The endopodal setae are about the same size as the sternal setae. The genitoventral plate is very large and extends almost to the anal plate. The posterior end is truncate. For shape and lines, see Fig. 12. It measures  $525\mu$  from the margin of the sternal plate by  $270\mu$  wide at the widest point. The plate has a single pair of setae opposite coxae IV.

The anal plate is triangular in outline with rounded corners. The plate is  $176\mu$  long by  $179\mu$  wide at the greatest length and width. The anal pore is near the anterior margin. The paired normal anal setae are located posterior of the anal pore. The post anal seta is heavier than the paired anal setae. The metapodal plates are large, triangular and sclerotized, as shown. Stigma and peritreme both normal for the genus. On the dorsal side of tarsus I is found a group of slender sensory hairs. Length of body not including the gnathosoma  $975\mu$ ; width  $690\mu$ .

Male. (Figs. 1-4). Gnathosoma. The chela is typical of the genus which has a short *digitus fixitus* and long *digitus mobilis*. The epistome, hypostome and lingula are about the same as those of the female. The corniculi are heavier than those in the female.

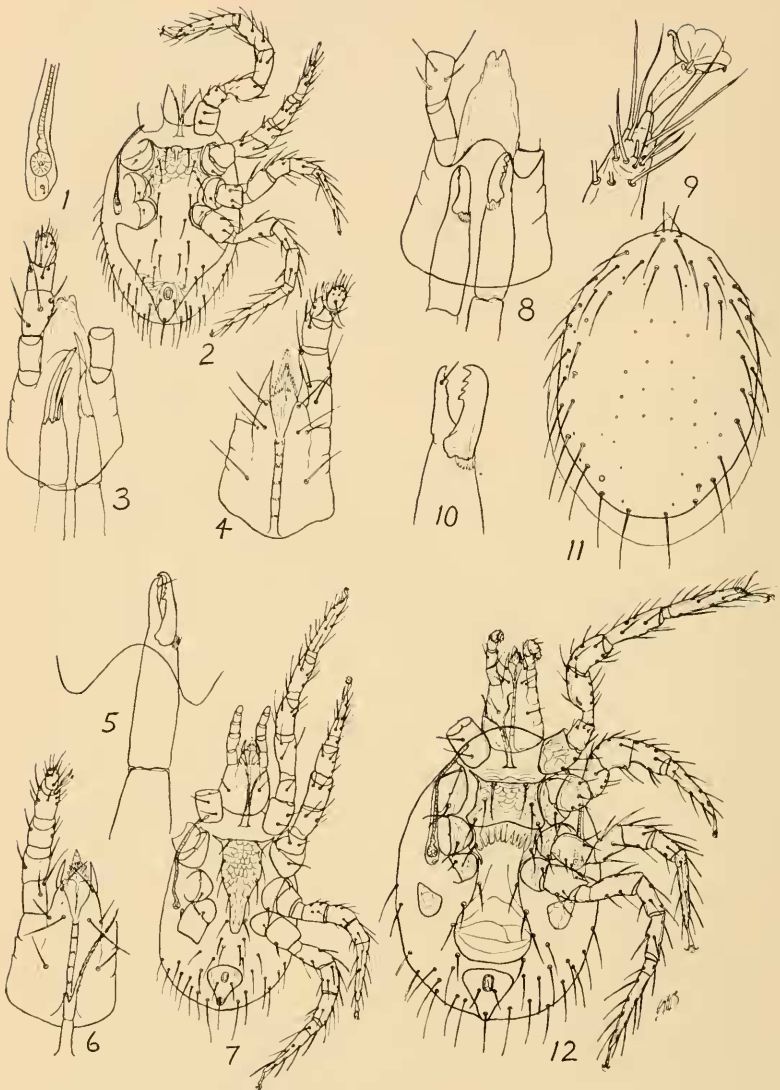


PLATE 5. HAEMOLAE LAP S BIBBYI

Fig. 1, stigma and peritremal plate of male; fig. 2, ventral view of male; fig. 3, dorsal view of gnathosoma of male, showing chelicerae and epistome; fig. 4, ventral view of gnathosoma of male; fig. 5, chelicera and basal portion of epistome of deutonymph; fig. 6, tritosternum and ventral view of gnathosoma of deutonymph; fig. 7, ventral view of deutonymph; fig. 8, epistome and chelicerae of female; fig. 9, dorsal view of tarsus I, female; fig. 10, chela of female; fig. 11, dorsum of female; fig. 12, ventral view of female.

Dorsal side. Dorsal shield covers almost all of dorsum. The shield is covered by a network of fine lines. There are about 40 pairs of setae and numerous pores. The ventral plates are united. They have a network of fine lines and 10 pairs of long setae, not including the three anal. The paired anal setae are below the anal pore. The postanal seta is much larger than the paired anal. The peritreme reaches to the middle of the first coxa. Length of body not including the gnathosoma  $735\mu$ ; width  $510\mu$ .

Deutonymph. (Figs. 5-7). The hypostome, gnathosoma and chelicerae are same as those in the female. The tritostereum is branched and covered with many fine hairs. The dorsal shield is entire and covers all but a narrow periphery of the dorsum. The shield has a network of irregular lines similar to those of female. Presternal area is lightly sclerotized; the sternal plate ends behind the fourth coxae with four pairs of marginal setae. The sternal plate has a network of irregular fine lines. The peritreme extends to the middle of the first coxa. The metapodal plate is small longitudinal in outline which is different from the triangular metapodal plate in the female. Length of body not including the gnathosoma  $663\mu$ ; width  $468\mu$ .

*Type host*: Rats, probably *Rattus frugivorus*.

*Type locality*: Samar, Philippine Islands.

*Cotypes*: Two males, mounted on one slide; two females, mounted on one slide; each labeled; Samar, June 29, 1945; F. F. Bibby, collector. In the United States National Museum.

Remarks. The characteristics of the genus *Haemolaclaps* were recently given in detail (Strandtmann, 1949) and need not be repeated here. The mite above described differs from the generic diagnosis by having, in the female, three instead of two teeth on the movable arm of the chela and in having a row of small teeth on the immovable arm.

The female may be distinguished from all other described species of *Haemolaclaps* by its rather broad genito-ventral plate, the large, triangular metapodal plates and the dentation of the chela. The male and nymph are not readily distinguished from other species. The legs I are longer in relation to body length (in all three forms, male, female and nymph, legs I and IV are longer than the body) and the corniculi of the gnathosoma are relatively more slender and pointed. All the specimens were cleared and stained red so the natural color is unknown.

We take pleasure in naming the mite for its discoverer, Mr. F. F. Bibby, an entomologist well known throughout the southwest United States because of his vast knowledge of the plants and insects, his sympathetic understanding of the natives, and his many varied and colorful extracurricular activities.

#### LITERATURE CITED

- Strandtmann, R. W., 1949. The blood-sucking mites of the genus *Haemolaclaps* in the United States. Jour. Parasit., 35: 325-352.